

REPLACEMENT SHEET

| | | | | | | | | | |
|-----------|-----|---------------|------------|-----------|----|------------|------------|------------|------------|
| Sa163 | 165 | RWFSFHREVD | TGTHYQTWEI | PKRDGC | KR | TLTAPKRELK | AVQRWVLNV | VERLPVH | -----GAAHG |
| Mx162 | 167 | RWFAPHREVD | TATHYVSWTI | PKRDGS | KR | TITSPKPELK | AAQRWVLSNV | VERLPVH | -----GAAHG |
| Mx65 | 136 | RHYSIHRPRE | RVRHYVTFV | PKRSGG | VR | LLHAPKRLK | ALQRRMLALL | VSKLPVS | -----PQAHG |
| Ec67 | 29 | FLTNVLYRIG | SONQYTOFTI | PKKGKC | VR | TISAPTORLK | DIQRICDLL | SDCRDEIFAI | -----PFSIG |
| Ec86 | 34 | VETLRLLIYT | ADFRIYITV | EKKGPEKMR | VR | TIYQPSRELK | ALQGWVLRNI | LDKLSSS | -----NAAYA |
| Ec73 | 14 | TKGFASEVMR | SPEPPKKWDI | AKKKGC | MR | TIYHPSKVK | LIQYWLNNV | FSKLPMD | -----PFATA |
| Ec107 | 25 | IQRLHALSNH | AGRHYYRIIL | SKRHGC | QR | LVLAPDYLLK | TVQRNLIKNV | LSQFPLS | -----PFATA |
| Consensus | | -----Y--h-h-- | -----KR-GG | K | R | Th--P--LK | -hQR-hL-h | hp-LPhp | -hA-G |

| | | | | | | | | |
|-----------|-----|------------|------------|-------------|------------|------------|------------|------------|
| Sa163 | 225 | FVAGRSILTN | ALAH--QGAD | VVVKVDMDKF | FPSVTWPRVK | GLLRKGGLE | NLATLLALLS | TEAPREVVR |
| Mx162 | 227 | FVAGRSILTN | ALAH--QGAD | VVVVDLMDKF | FPSVTWRRVK | GLLRKGGLE | GTSTLLSLLS | TEAPREAVQF |
| Mx65 | 196 | FVPGRSIKTG | AAPH--VGRR | VVLKLDLMDKF | FPSVTFARVR | GLLKALGYGY | PVAATLAVLM | TESERQPV |
| Ec67 | 97 | FERGKSIILN | AYKH--RGKQ | IILNIDLMDKF | FESFNFGVR | GYFLSNQDL | LNPVVATTLA | ----- |
| Ec86 | 96 | FEKHQSILNN | ATPH--IGAN | FILNIDLED | FPSLTANKVF | GVFHSLGNY | LISSVLT | ----- |
| Ec73 | 74 | FVKNRSIKSN | ALLHAESNK | YVKIDLMDKF | FPSIKFTDF | YAFTRYDRF | EFTTEYDLEL | LQLIKT---- |
| Ec107 | 85 | YRPGCPIVSN | AQPH--CQOP | QILKLDIENF | FDSISWLQV | RVFRQAQLR | NVVTMLT | ----- |
| Consensus | | F--GRSihpN | A--H--G-- | hhhKhDhKDF | FPSphp-Rvp | Ghh----- | ---Shh--- | |

| | | | | | | | | |
|-----------|-----|------------|------------|------------|------------|------------|-----------|-----------|
| Sa163 | 293 | RGETLYVAKG | PRALPQGAPT | SPALTNALCL | RLOKRLSALS | ---KRLGFTY | TRYADLTFS | WRRAKKSQK |
| Mx162 | 285 | PRELLHVAKG | PRALPQGAPT | SPGITNALCL | KLDKRLSALA | ---KRLGFTY | TRYADLTFS | WTKAKPKPR |
| Mx65 | 264 | EGILEHVPVG | PRVCVQGAPT | SPALCNAVLL | RLDORLAGLA | ---RRYGTY | TRYADLTFS | GDDVTA |
| Ec67 | 155 | -----KAACY | NGTLPQGSPC | SPISNLICN | INDMRLAKLA | ---KKYCTY | TRYADLTFS | TNKNTFUDM |
| Ec86 | 151 | -----KICCY | KNLLPQGAPS | SPKLANLICS | KLDYRIQGYA | ---GSRGLY | TRYADLTFS | AQSMKK |
| Ec73 | 140 | -----ICFIS | OSTLPIGFPT | SPLIANFVAR | ELDEKLTQKL | NAIDKLNATY | TRYADLTFS | TNMKGA |
| Ec107 | 140 | -----WICCY | NDALPQGAPT | SPAISNLVMR | RFDERIGEW | ---QARGITY | TRYCDMTFS | GHFNAR |
| Consensus | | -h--- | -hLPQGAPT | SP-h-Nhh-- | KLDpRL--h- | pp-GhTY | TRYADLTFS | -pp--- |

| | | | | | | | | |
|-----------|-----|------------|------------|------------|-----------|---|-------------|-----|
| Sa163 | 360 | ELPLADAPVA | LLLARVKGVL | EAEGFTLHPD | KTRVORK | G | SRQRVTGLVV | 407 |
| Mx162 | 362 | --RTQRPVA | VLLSRVQEVV | EAEGFRVHPD | KTRVARK | G | TRQRVTGLVV | 407 |
| Mx65 | 327 | --LE | RVRALAARYV | QEDGFVNRE | KTRVORR | G | GAQRVTGVTV | 366 |
| Ec67 | 217 | --ATVQPEGV | VLGKVLVKEI | ENSGFEINDS | KTRLTYS | T | SRQEVVTGLTV | 262 |
| Ec86 | 209 | -----VV | KARDPLFSII | PSEGLVINSK | KTCISGP | R | SQRKVTGLVI | 248 |
| Ec73 | 201 | -----SKL | ILDCPKRTMK | EIGDPFKINI | KPKKICSAS | G | GSIVVTGLKV | 243 |
| Ec107 | 198 | ----- | QVKNKVCGLL | AELGLSLNKR | KGCLIAA | C | KRQQVTGIVV | 235 |
| Consensus | | --h--- | -h-phh | p-pGhphppp | KT-h--p | | ppQpVTGL-V | |